Claim 15 (Original) The process as claimed in claim 13, wherein cut material arising during film production is reused as regrind in the film production in amounts of up to 60% by weight based in each case on the total weight of the film.

Remarks

It is submitted that the finality of this rejection is improper. On page 5 numbered paragraph 9, the Examiner rejects claims 1, and 3-15 under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1-17 of U.S. Pat. No. 6,054,212 (Peiffer et al.). However, in explaining this rejection, the Examiner refers to U.S. Pat. Nos. 6,391,410 and 6,149,995, both issued to Peiffer et al., neither of which are listed as grounds for the rejection. Thus, this rejection is confusing and unclear. Does the Examiner mean to reject the claims based on a combination of the three references? Are the two patents not listed as references relied upon to make the rejection? Applicant respectfully requests the Examiner to clarify this issue so that Applicant can properly respond to it. Therefore, it is submitted that the finality of the office action should be withdrawn so that Applicant has as opportunity to address this grounds for rejection once it is clarified.

On page 2 numbered paragraph 3 of the Office Action, the Examiner rejected claims 1, and 3-15 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically the Examiner states that Claim 1 is vague and indefinite because the phrase "up to 10% by weight" is inconsistent with the requirement that the outer layer contain 91-97 wt% PEN units. Applicant has amended claim 1 so that it now reads "up to 9% by weight".

On page 3 numbered paragraph 7 of the Office Action, the Examiner provisionally rejected claims 1, and 3-15 under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1-23 of copending Application No. 09/274,781. Specifically, the Examiner states that it would be obvious to a person of ordinary skill in the art at the time the invention was made to adjust the relative thickness of the layers of the film

claimed depending on the specific mechanical, optical, and/or surface properties required for a given application in addition to economic considerations based on material costs. Furthermore, the Examiner argues that one of ordinary skill in the art would have incorporated additional layers such as an intermediate adhesive or bonding layer in order to obtain high adhesion between the outer and base layers.

In light of the comments presented in response to the Examiner's rejection of numbered paragraph 8 below, and the declaration by the inventors submitted herewith, this rejection is respectfully traversed.

On page 4 numbered paragraph 8, the Examiner rejects claims 1, and 3-15 under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1-20 of U.S. Pat. No. 6,391,410 (Peiffer et al.) or claims 1-22 of U.S. Pat. No. 6,149,995 (Peiffer et al.). Specifically, the Examiner states that it would be obvious to a person of ordinary skill in the art at the time the invention was made to adjust the relative thickness of the layers of the film claimed depending on the specific mechanical, optical, and/or surface properties required for a given application in addition to economic considerations based on material costs. Furthermore, the Examiner argues that one of ordinary skill in the art would have incorporated additional layers such as an intermediate adhesive or bonding layer in order to obtain high adhesion between the outer and base layers. In light of the comments hereto, and the declaration by the inventors, this rejection is respectfully traversed.

It is known that PEN film has better barrier properties than PET film. Thus, in order to achieve these improved barrier properties, previous inventors simply increased the thickness of the barrier layer for a given concentration of PEN, thus incorporating more PEN into film, but also adding thickness thereto. The present inventor however, recognized that it was possible to increase the barrier properties of the film by increasing the concentration of PEN in the outer barrier layer instead of increasing the thickness thereof. To maximize the barrier properties, the present invention maximizes the PEN content of the barrier layer. PEN is an expensive material, so in order to make applicant's current film with any economic viability it is desirable to have a PEN layer just thick enough to yield the barrier properties desired. Therefore, the outer barrier

layer of the current invention comprises no more than 25% by weight of the total film making it more economical than other barrier films.

As the concentration of PEN in the outer barrier layer increases however, the thin barrier layer of the current invention tends to delaminate from the co-extruded PET base layer. This problem was first encountered by the present inventors while working on the present invention. There was no delamination problem in the prior art, since barrier properties were typically improved by increasing the thickness of the barrier layer, not by increasing the concentration of PEN in the film. Delamination only becomes a problem with the film of the present invention when the outer layer approaches 100% PEN. None of the prior art references set forth in rejections 2-6 recognizes the delamination problem. In particular, the prior art references such as US Patent 6,391,410 and 6,149,995 to Peiffer et al. discuss the outer layer comprising up to 60% by weight ethylene terephthalate units. When such a high PET weight exists in the outer layer, delamination is not exhibited between the outer and the base layer. Delamination is not a problem where the barrier layer consists of higher PET concentrations.

Therefore the Examiner's conclusion, that a person skilled in the art at the time the invention was made would seek to increase or maximize the inner layer adhesion in order to prevent delamination, is in error. The prior art patents exhibited no delamination problems. The adhesion between the PEN/PET outer layer with the PET base layer was more than adequate. Thus there was no need as suggested by the Examiner to increase or maximize the inner layer adhesion.

In order to avoid delamination, the current invention recognizes that the outer layer must contain at least 3 and up to 9% PET (with the remaining portion of the outer layer containing 91-97% PEN). Applicant has recognized that outer barrier layers of laminate films of this composition give the optimal barrier properties, and exhibit no delamination. This was not known, taught, or suggested in any of the references set forth by the Examiner in this or any other rejection. This is attested to in the declaration from the inventor that is submitted herewith.

Additionally, the Exmainer states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use conventional adhesion promoting treatments or layers to increase or maxkimize the interlayer adhesion in the films disclosed in the above cited referenced in order to prevent delamination. The rejection is respectfully traversed. The Examiner has not cited any references that disclose the use of inter layer adhesion treatments with the current film, nor do the references cited by the examiner provide any motivation or suggestion to employ these between the layers of the current film. The Exmainer cannot cite any references to this because there was no delamination problem experienced in the films of the prior art. If the Examiner still maintains that the use of adhesion promoting treatments would be obvious, then it should be no problem for the Examiner to find prior art disclosing their use in combination with films of the same composition as that of the applicant's, or at the very least some motivation/suggestion to make such a combination. For a rejection under 35 U.S.C. 103 to be proper under the Deere standards some reference must disclose the differences. The Examiner is not permitted to take judicial notice of some characteristic.

On page 5 numbered paragraph 9, the Examiner rejects claims 1, and 3-15 under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1-17 of U.S. Pat. No. 6,054,212 (Peiffer et al.). Specifically, the Examiner states that it would be obvious to a person of ordinary skill in the art at the time the invention was made to adjust the relative thickness of the layers of the film claimed depending on the specific mechanical, optical, and/or surface properties required for a given application in addition to economic considerations based on material costs. Furthermore, the Examiner argues that one of ordinary skill in the art would have incorporated additional layers such as an intermediate adhesive or bonding layer in order to obtain high adhesion between the outer and base layers.

This rejection is confusing and unclear. Does the Examiner mean to reject the claims based on a combination of the three references? Are the two patents not listed as references relied upon to make the rejection? Applicant respectfully requests the Examiner to clarify this issue so that Applicant can properly respond to it. Therefore, it is submitted that the finality of the office action should be withdrawn so that Applicant has as opportunity to address this grounds for rejection once it is clarified. Despite the confusion in this current rejection,

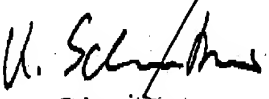
applicant believes that in light of the comments presented above in response to the rejection of numbered paragraph 8, and the declaration by the inventors, this rejection is nevertheless traversed.

On page 5 numbered paragraph 10, the Examiner rejects claims 1, and 3-15 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 6,054,212 (Peiffer et al.), European Patent Applications 0878928 A2, 0878297 A2, 0945256 A2, 0945259, A2 0945261 A2, 0945262 A2, or 0945263 A2. The Examiner points out that none of the references disclose the recited interlayer adhesion. However, the Examiner states that it would be obvious to a person of ordinary skill in the art at the time the invention was made to use adhesion promoting treatments or layers to increase or maximize the interlayer adhesion in the films disclosed in the cited references in order to prevent delamination. In light of the comments presented above in response to the rejection of numbered paragraph 8, and the declaration by the inventors, this rejection is respectfully traversed.

On page 7 numbered paragraph 11, the Examiner rejects claims 1, and 3-15 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 6,149,995 (Peiffer et al.). The Examiner points out that none of the references disclose the recited interlayer adhesion. However, the Examiner states that it would be obvious to a person of ordinary skill in the art at the time the invention was made to use adhesion promoting treatments or layers to increase or maximize the interlayer adhesion in the films disclosed in the cited references in order to prevent delamination. In light of the comments presented above in response to the rejection of numbered paragraph 8, and the declaration by the inventors, this rejection is respectfully traversed.

In view of the declaration from the inventors and in light of these remarks, it is submitted that the present application is now in condition for examination and such is earnestly solicited. Or, at a minimum, it is submitted that the finality of the previous office action was in error, and should be withdrawn, thereby allowing the Applicant a fair opportunity to respond to the rejections raised by the examiner.

Respectfully submitted,



Klaus Schweitzer
(See attached Limited Recognition Form)
ProPat, L.L.C.
2912 Crosby Road
Charlotte, North Carolina 28211
Telephone: (704) 365-4881
Fax: (704) 365-4851

Attorney's Docket No. 00/121 MFE